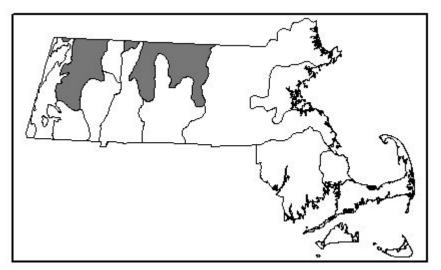
Community Name: HIGH ELEVATION SPRUCE - FIR FOREST / WOODLAND

Community Code: CT1D300000

SRANK: S2



Concept:

Forest or woodland with trees dwarfed from wind on the tops of the tallest, most exposed mountains in Massachusetts. Conifers, balsam fir and red spruce, dominate, and often form dense thickets.

Environmental Setting:

Often stunted trees from wind exposure, occurring at the highest, most exposed areas. Down slope it grades into taller, more diverse Spruce - Fir - Northern Hardwood Forests.

Vegetation Description:

A low diversity coniferous forest of high elevations, usually on steep stony, upper slopes or level ridgetops. Balsam fir (*Abies balsamea*) is dominant, associated with red spruce (*Picea rubens*). Paper birch, heart-leaf paper birch (*Betula papyrifera* and *B. cordifolia*), and yellow birch (*B. alleghaniensis*) occur in lower numbers. Where there is light, shrubs such as mountain maple (*Acer spicatum*), mountain holly (*Nemopanthus mucronatus*), American mountain ash (*Sorbus americana*), and hobblebush (*Viburnum lantanoides*) may grow. Blue-bead lily (*Clintonia borealis*), mountain wood-sorrel (*Oxalis montana*), bunchberry (*Cornus canadensis*), and bristly clubmoss (*Lycopodium annotinum*) grow scattered on mosses or a thick layer of needles.

Associations:

Habitat Values for Associated Fauna: The tops of Massachusetts's highest, most exposed mountains provides habitat for some northern animals such as Swainson's Thrush (*Catharus ustulatus*) and pygmy shrew (*Sorex hoyi*), as well as the state-protected species listed below. Also expected would be more widespread species that use conifer forests, such as snowshoe hare (*Lepus americanus*), porcupine (*Erethizon dorsatum*), northern flying squirrel (*Glaucomys sabrinus*), deer mouse (*Peromyscus maniculatus*), and birds such as Olive-sided Flycatcher (*Contopus cooperi*) and Rusty Blackbird (*Euphagus carolinus*).

Associated Rare Plants:

AMELANCHIER BARTRAMIANA	BARTRAM'S SHADBUSH	T
BETULA CORDIFOLIA	HEART-LEAF PAPER BIRCH	- WL
LUZULA PARVIFLORA SSP MELANOCARPA	BLACK-FRUITED WOODRUSH	E
SORBUS DECORA	NORTHERN MOUNTAIN-ASH	E
Associated Rare Animals:		
DENDROICA STRIATA	BLACKPOLL WARBLER	SC
SOREX DISPAR	LONG-TAILED SHREW	SC

From: Swain, P.C. & J.B. Kearsley. 2001. Classification of the Natural Communities of Massachusetts. Version 1.3. Natural Heritage & Endangered Species Program, Division of Fisheries & Wildlife. Westborough, MA.

Natural Heritage & Endangered Species Program, Massachusetts Division of Fisheries & Wildlife

Examples with Mt. Greylock State Reservation, Lanesboro; much poorer community examples occur at Mt.

Public Access: Wachusett, Princeton; and Mt. Watatic, Ashburnham

Threats: Development of the summit, clearing for parking, trails, ski lift facilities, or communications towers.

Management Needs:

Synonyms

USNVC/TNC: Picea rubens - Abies balsamea Forest Alliance -- Abies balsamea- (Betula papyrifera var. cordifolia)

Forest [CEGL006112]; Picea rubens - Abies balsamea Forest Alliance -- Picea rubens- Abies balsamea-Sorbus americana Forest [CEGL006128]; Picea rubens Woodland Alliance -- Picea rubens/

Vaccinium angustifolium - Sibbaldiopsis tridentata Woodland [CEGL006053].

MA (old name): NEW ENGLAND HIGH ELEVATION SPRUCE/FIR FOREST.

ME: Subalpine spruce- fir forest community; Spruce slope forest; Spruce woodland.

NH: 1997 - High-elevation spruce-fir forest; 1994 - Subalpine and alpine Community Complexes Mountain

Spruce-fir formation..

VT: Montane spruce-fir Forest, but with parts of High-elevation spruce-fir forest and subalpine

heath/krummolz community.

NY: Mountain spruce-fir forest, Mountain fir forest, Alpine krumholz.

CT: Not applicable.

RI: Not applicable.

Weatherbee: Part of Mesic Northern Conifer Forest Community.

Author: P. Swain **Date:** 1/11/00